

Songs for the Seasons: Music Preferences Change With the Season

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Introduction

- The study of music and its effects on human emotion and behavior has become a popular topic in the field of psychology.
 - Rentfrow & Gosling's (2003) research classified numerous genres of music into four music-preference dimensions and explored the connection between music preference and personality.
 - North & Hargreaves (2007) found that music preferences correlate with a variety of different lifestyle choices such as interpersonal relationships or living arrangements.
 - Pettijohn & Sacco (2007) studied the top *Billboard* hit songs from 1955-2003 and found that American's music preferences change with the U.S. social and economic conditions.
 - Other research, such as that of Korenman & Peynicoglu (2004) and Dalgleish et al. (2001) has found that listening to music can often cue the recollection of episodic memory and metamemory of a stimulus, thus associating positive and negative memories with specific seasons.
- It is apparent that music preferences and environmental conditions are related, and this research explores the connections between both winter and summer seasonal conditions and individual music preferences.

Hypotheses

- The purpose of this study was to demonstrate that environmental conditions influence musical preferences. Specifically, we hypothesized that:
 - Upon reading a winter scenario, participants will be more likely to report a preference for either reflective & complex music or intense & rebellious music.
 - Upon reading a summer scenario, participants will be more likely to report a preference for upbeat & conventional music or energetic & rhythmic music.

Method

- Participants
 - 242 male (32.6%) and female (67.4%) college students
 - mean age=19.57 years ($SD=3.06$)
- Materials
 - Scenarios of typical winter and summer experiences
 - Rentfrow & Gosling's (2003) Short Test of Music Preference (STOMP)
 - Music listening habits and choice measures

- Procedure
 - Participants were asked to read a scenario depicting either a typical winter experience or a typical summer experience. They were then asked to report whether the scenario that they had just read was common to their own seasonal experience and what emotions were elicited upon reading the scenario. The participants then chose a single music genre they would be most likely to listen to if the scenario were to be taking place in real life and a single music-preference classification that they would be most likely to listen to and would best describe their mood in that scenario. These music-preference classifications, derived from Rentfrow & Gosling's (2003) Short Test of Music Preference (STOMP), included reflexive & complex, intense & rebellious, upbeat & conventional, and energetic & rhythmic. Participants were also asked how often they listen to specific genres of music, where and when they listen to music the most, and their five most listened to genres of music.

Rentfrow & Gosling's (2003) Short Test Of Music Preference (STOMP) Dimensions

Reflective & Complex

- Classical
- Jazz
- Blues
- Folk

Intense & Rebellious

- Alternative
- Rock
- Heavy Metal

Upbeat & Conventional

- Pop
- Religious
- Soundtracks
- Country

Energetic & Rhythmic

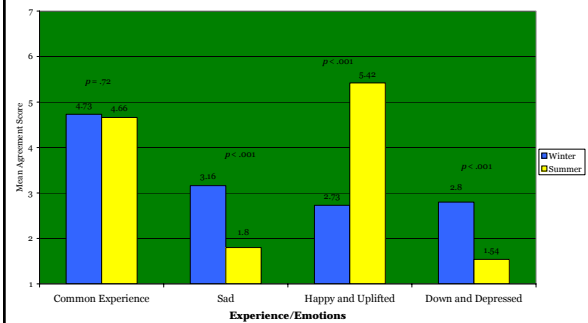
- Rap/Hip-Hop
- Soul/Funk
- Electronica/Dance



Results

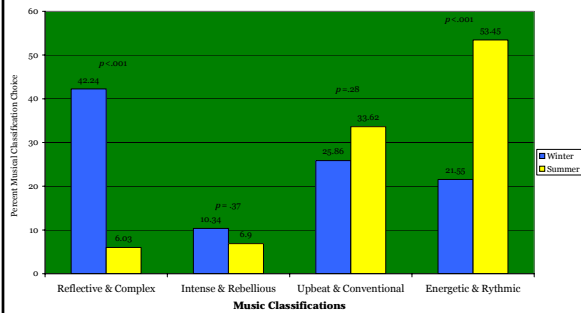
- A manipulation check verified that the summer and winter experiences reflected common experiences of the college students who participated in the study (see Figure 1).
- In addition, participants reported feeling more sad and down and depressed after reading the winter scenario and more happy and uplifted after reading the summer scenario. See Figure 1 for results.
- Music classification choice results are presented in Figure 2.
- Music genre choice results are presented in Figure 3.

Figure 1. Mean Agreement with Experiences/Emotions By Condition



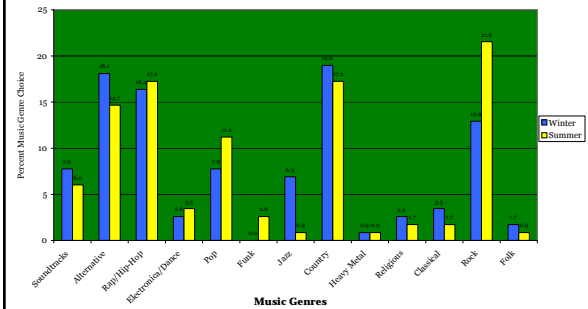
Note: Higher scores indicate greater agreement with the respective questions. Independent means *t*-tests comparing the winter and summer conditions for each experiences/emotions category were conducted and results are presented on the figure.

Figure 2. Mean Percentage Musical Classification Choice By Condition



Note: A chi-square for independence was conducted to determine whether there was a relationship between condition and music classification choices. The outcome was significant, $\chi^2(3, N=232)=13.8, p<.001$. Goodness of fit test results are provided on the figure.

Figure 3. Mean Percentage Music Genre Choice By Condition



Note: A chi-square for independence was conducted to determine whether there was a relationship between condition and music genre choices. The overall outcome was not significant, $\chi^2(12, N=232)=13.8, p<.31$.

Discussion

- Our hypotheses were generally supported.
 - Participants preferred reflective & complex music after reading the winter scenario.
 - There was a preference trend for more intense and rebellious music in the winter condition.
 - Participants preferred energetic & rhythmic music after reading the summer scenario.
 - There was a preference trend for more upbeat and conventional music in the summer condition.

Possible Study Applications

- This data could be used to predict when consumers are most likely to purchase certain genres of music or the most effective time to advertise for a specific classification of music.
- Music could also be combined with cognitive behavioral therapy to counteract the effects of seasonal affective disorder (SAD), which often occurs in the fall and winter seasons (Rohan & Sigmon, 2003).
- Knowing that music and emotion are interrelated, music could be used in a classroom setting to either calm students coming back from recess to put them back in the mindset of learning or could be used to stimulate excitement before an activity.